

12.2 MASTER TRANSPORTATION PLAN

Amended September 17, 1996, Street Classifications, Res. No. 97-96

Amended September 6, 2005, Downtown Master Plan Street Classifications, Res. No. 183-05

Amended September 4, 2007, Res. No. 161-07

The Master Transportation Plan is the guiding policy that the community, City Staff, the Planning Commission and the City Council utilize to proactively guide decisions regarding street classification, design, location, form and function. The Master Transportation Plan prescribes and plans for the development of a multi-modal transportation system in the form of streets, sidewalks, bike lanes, trails and transit. A multimodal transportation system is vital to growing a livable transportation network. Consistent planning ensures that streets will efficiently circulate traffic within the community and connect Fayetteville to the rest of the region. Special emphasis should be placed on multi-modal transportation infrastructure design, access management and traffic speed and volume considerations when planning streets. The Master Transportation Plan is updated on a five year basis in conjunction with City Plan 2030 in order to be adaptable to change over time.

The Master Transportation Plan contains the Master Trails Plan and the Master Street Plan.

Master Trails Plan

The Fayetteville Alternative Transportation and Trails Master Plan (FATT Plan), guides the development of trails in the City's expanding trail network. The Master Trail Plan Map illustrates future trail alignments and trail corridors for the purpose of acquiring easements and right-of-way. As development occurs adjacent to future trail alignments, careful attention will be paid to acquiring easements and providing site design input during the development review process. The trail cross-sections that follow the Master Street Plan cross sections will be utilized for the construction of City trails. Trail surface materials may vary according to site considerations such as proximity to floodplains or floodways.

Master Street Plan

The Master Street Plan is comprised of a map illustrating the street classification and location, and a document of street cross sections showing the dimensional requirements of the street. In conjunction, these two documents are used to guide long range traffic planning through street function, design and location.

The City supports context sensitive street design that acknowledges the function and use of the street in relation to current and future land use. The design and dimensions of streets that fall under the same functional classification may vary greatly due to the surrounding existing or future land uses and the function of the street. For instance, a low traffic



speed collector in a neighborhood may have on-street parking while a higher traffic speed collector would have bike lanes. The City's access management and street connectivity policies provide the tools to guide the access and dispersal of traffic.

Low Impact Development: The City encourages the use of Low Impact Development (LID) stormwater management strategies in street design and construction. Each of the street cross sections can be modified to incorporate LID best practices for stormwater management. Streets that include landscape strips or bump-outs are ideal for implementing LID strategies such as swales or infiltration basins. Developers and engineers should work closely with the City's Development Services Department to plan and design appropriate stormwater management strategies and structures.

Public Transportation: The construction of bus benches, shelters and pull-offs is a critical part of a successful transportation system. However, the need for such facilities is ultimately determined by the transportation providers. Therefore, the City should consult with transportation providers prior to the design of any new street, or major street improvement project to determine if the need for new facilities exists.

Streets in University of Arkansas Campus: The City of Fayetteville and the University of Arkansas will partner together in the planning, design and construction or reconstruction of streets located within the University of Arkansas campus area. These streets are identified on the map and within this document. Streets identified on the Master Street Plan Map and within the University of Arkansas boundary are intended to be reviewed concurrently with City and University staff prior to design. These streets should be consistent with the policies of the Master Street Plan, but may require alternative cross-sections due to physical constraints unique to the University.

International Fire Code: The International Fire Code (IFC), which the State of Arkansas has adopted, requires a 20-foot minimum of unobstructed width on all roads, which is reflected in the proposed street cross-sections. If structures on either side of the road exceed 30 feet or three stories, then the IFC requires a 26-foot minimum of unobstructed width. This document recognizes that street cross-sections may be modified to meet the IFC requirements.

The following street cross-sections are functionally classified in accordance with the U.S. Department of Transportation's National Highway Functional Classification Study Manual. In addition, the street cross-sections provide sensitivity to context by providing options for both suburban and urban developments and accommodating cyclists and low-impact development neighborhoods. Additional utility easements will be required outside of the specified right-of-way on a project specific basis, as determined by the utility companies.



12.2.1 ALLEYS

Alleys are used in conjunction with streets to provide rear access to properties, garages and off-street parking. Driveways connected to alleys should have sufficient depth to allow vehicles to park and not encroach into the alley right-of-way.

Solid Waste

Solid waste pick-up is allowed, subject to the following standards:

- "No parking" signs are installed at the entrance(s) and mid-block locations.
- Designated locations for carts and recycle bins are kept free of obstructions.
- Bulk hauling and brush collection is placed at the public street.
- Building walls and projections are located at least 10' from the edge of the alley pavement. To prevent encroachment into the right-of-way, additional separation may be required if parking is provided between the building and alley.
- On-street parking is provided.
- Address numbers are installed on the front and rear of every structure.
- Minimum radius requirements are provided.
- Dead-end alleys are prohibited.

Fire Department

Alleys used in conjunction with single- and two-family units are not intended to serve as fire access roads when structures also adjoin a private or public street that provides the required fire access. Fire access roads shall extend to within 150 feet of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

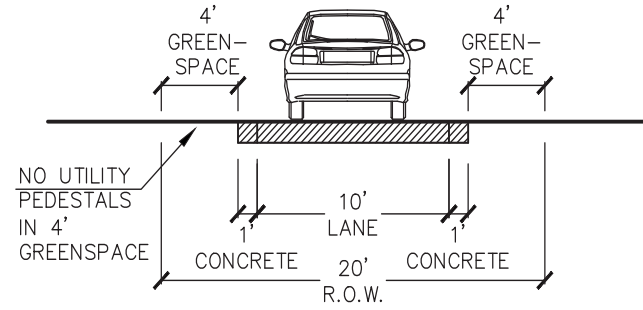
When an alley serves as the sole access, or when more than one access is required due to building height, condition of terrain, climatic conditions, the potential for impairment of a single road by vehicle congestion, or other factors that could limit access, alleys may need to be designed in accordance with the Arkansas Fire Code to support apparatus access, with approval from the fire code official.



EXHIBIT B

1a RESIDENTIAL REAR ALLEY: ONE-WAY

Design Service Volume: < 200 vpd
 Travel Lanes: One 10' lane
 Parking: Not allowed within alley R.O.W.
 Paved Width: 12' from outer edge of concrete strip
 Right of Way: 20'
 Sidewalks: None
 Greenspace: Both sides of alley, min. 4' wide, unencumbered
 Curb cuts: Continuous access possible
 No curb required



1b RESIDENTIAL REAR ALLEY: TWO-WAY

Design Service Volume: < 200 vpd
 Travel Lanes: Two 7' lanes
 Parking: Not allowed within alley R.O.W.
 Paved Width: 16' from outer edge of concrete strip
 Right of Way: 20'
 Sidewalks: None
 Greenspace: Both sides of alley, min. 2' wide, unencumbered
 Curb cuts: Continuous access possible
 No curb required

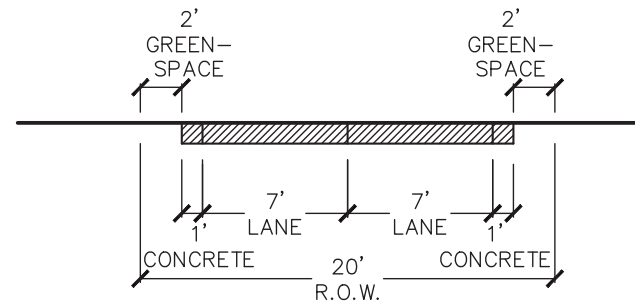
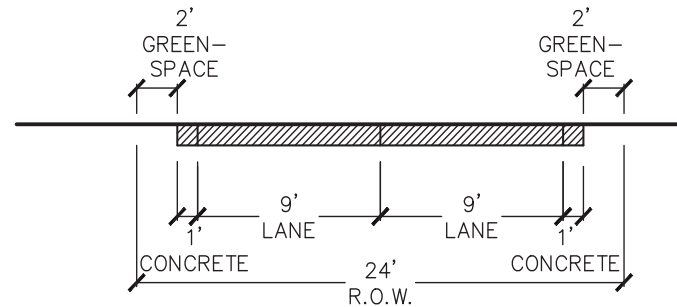


EXHIBIT B

1c COMMERCIAL REAR ALLEY: ONE- OR TWO-WAY

Design Service Volume:	< 200 vpd
Travel Lanes:	Two 9' lanes
Parking:	Not allowed within alley R.O.W.
Paved Width:	20' from outer edge of concrete strip
Right of Way:	24'
Sidewalks:	None
Greenspace:	Both sides of alley, min. 2' wide, unencumbered
Curb cuts:	Continuous access possible No curb required



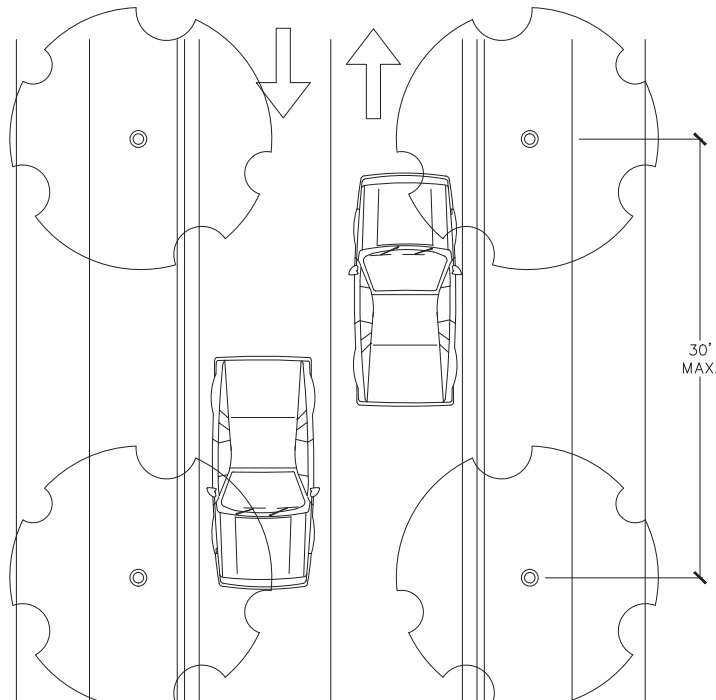
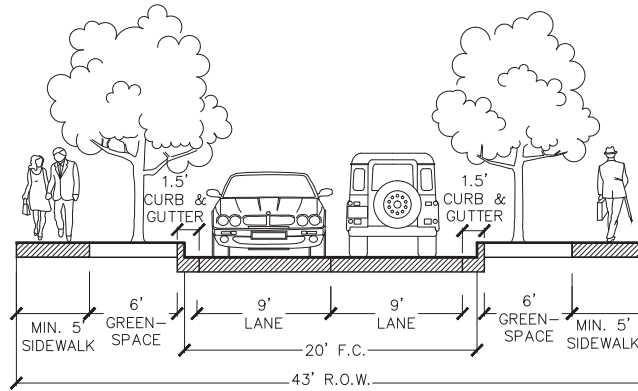
12.2.2 RESIDENTIAL STREETS

RESIDENTIAL STREETS provide for the lowest level of traffic and service. They provide access to residential property and are intended to be used only by local traffic. A high degree of street connectivity is required for easy dispersal of traffic. Residential Street block lengths shall not exceed 600 feet. Residential streets have a low level of access management, with curb cuts permitted every 50 feet.

2a RESIDENTIAL:

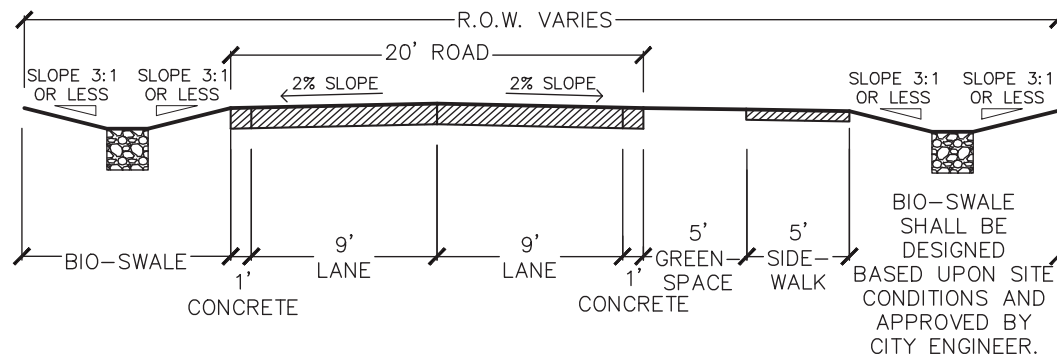
Design Service Volume:	< 300 vpd
Desired Operating Speed:	15-20 mph
Travel Lanes:	Two 9' lanes
Parking:	Not Allowed
Paved Width:	20' from face of curb
Right of Way:	43'
Sidewalks:	Both sides of street, min. 5' wide, located in R.O.W. at R.O.W. line
Greenspace:	Both sides of street, min. 6' wide

* ST 37 may substitute for the Residential Street cross-section urban condition.



2b RESIDENTIAL LOW-IMPACT DEVELOPMENT:

Design Service Volume: < 300 vpd
 Desired Operating Speed: 15-20 mph
 Travel Lanes: Two 9' lanes
 Parking: Not Allowed
 Paved Width: 20'
 Right of Way: Varies
 Sidewalks: One, at least 5' wide, adjoining 5' greenspace
 Greenspace: One side of street, min. 5' wide
 Bio-Swale: Both sides of street, width dependent upon site conditions and approved by City Engineer.
 Tree plantings may be permitted by the Urban Forester



12.2.3

LOCAL STREETS

LOCAL STREETS provide for a moderate level of traffic flow and service. They provide access to abutting land uses and provide connections to higher order street classifications. Local Urban streets are encouraged in City Neighborhood and Urban Center areas as depicted on the Future Land Use Map. Local Urban Streets are also appropriate for areas that may function as a main street for a neighborhood, offering mixed uses and a pedestrian-friendly environment. LOCAL STREETS have a low to medium level of access management, with curb cuts permitted every 50 feet.

3a LOCAL:

Design Service Volume: < 4,000 vpd
 Desired Operating Speed: 20-25 mph
 Travel Lanes: One 10' lane,
 One 9' lane
 Parking: One 7' lane
 Paved Width: 27' from face of curb
 Right of Way: 50'
 Sidewalks: Both sides of street, min. 5' wide, located in R.O.W. at R.O.W. line
 Greenspace: Both sides of street, min. 6' wide. May be widened to facilitate Low-Impact Development techniques, subject to approval by City Engineer.

* ST 45 may substitute for local street cross-section in an urban condition.

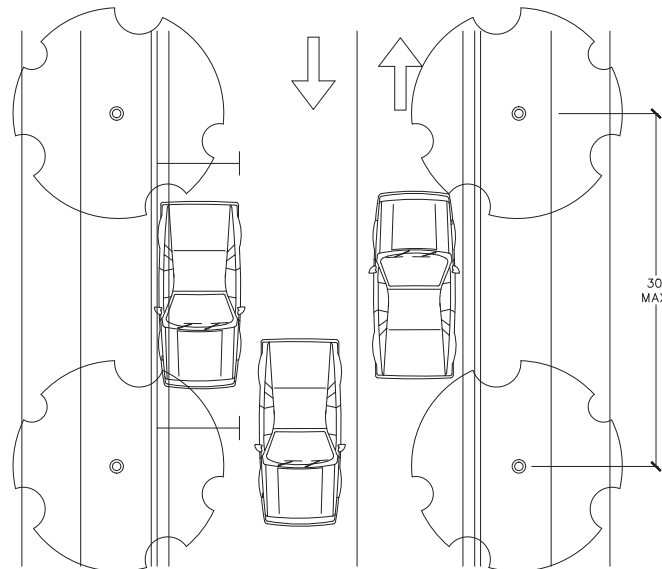
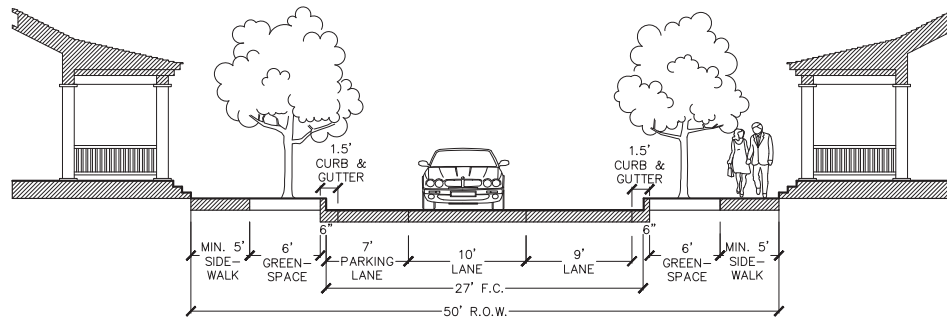
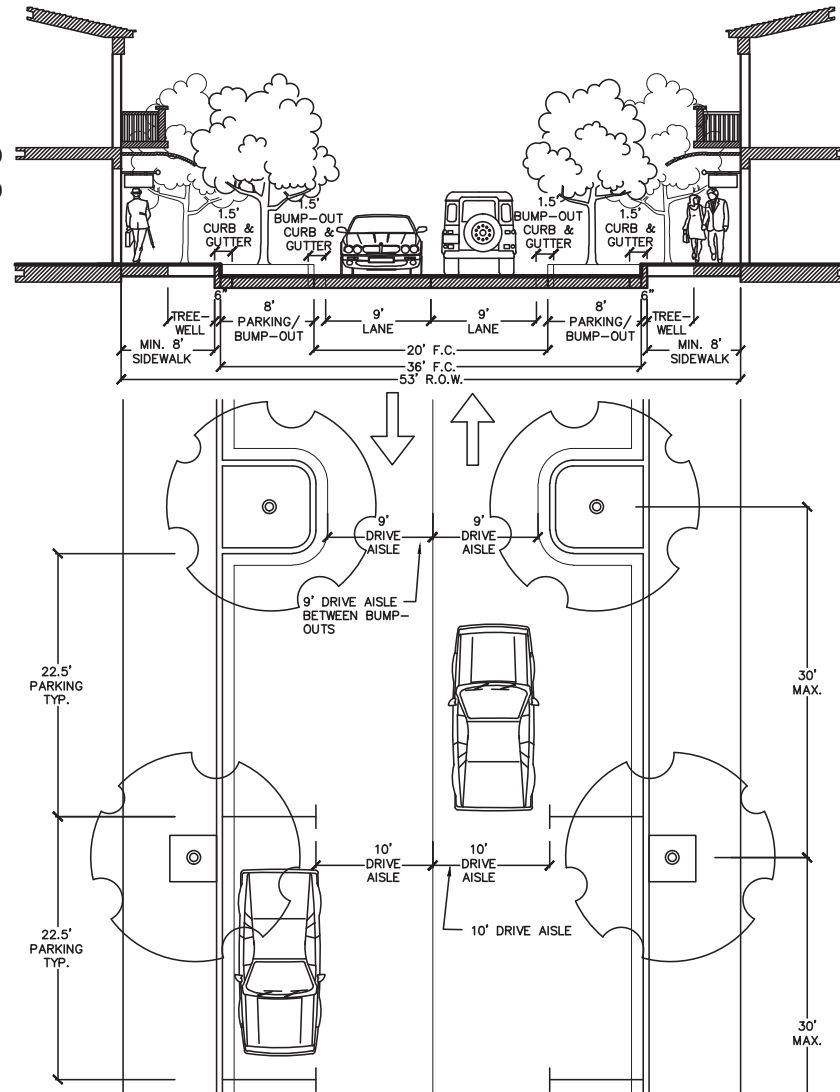


EXHIBIT B

3b LOCAL URBAN:

Design Service Volume: < 4,000 vpd
 Desired Operating Speed: 20-25 mph
 Travel Lanes: Two 9' lanes
 Parking: Two 8' lanes with bump-outs
 Paved Width: 20' from face of bump-out curb
 36' entire width to face of curb
 53'
 Right of Way:
 Sidewalks: Both sides of street, min.
 8' wide with grated tree wells
 against curb
 Greenspace: Both sides of street, tree wells



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12.2.4

COLLECTOR STREETS

COLLECTOR STREETS provide traffic circulation within residential, commercial, and industrial areas. They collect traffic from local or residential streets in neighborhoods and facilitate traffic movement into the arterial system. Connections between arterials should be direct in order to disperse traffic throughout the city. Collector streets vary in width and function as they respond to the context of the adjacent land uses. A minimum right-of-way of 59 feet shall be provided where a collector is depicted on the Master Street Plan with a 70-foot right-of-way provided at intersections with other collectors, minor arterials and principal arterials. The intersection right-of-way must extend a minimum of 200 feet from the intersection. A 70-foot right-of-way may be required if the volume or turning movements of traffic generated or predicted warrants a continuous turning lane. All collectors have a moderate level of access management with curb cuts permitted every 100 feet.

The City recognizes that the design of collector streets may vary depending upon the context of the existing and future land use in a particular area. The following three collector cross sections provide flexibility in context while utilizing a standard right-of-way and pavement width. This permits multiple configurations of on-street parking and bicycle facilities through different pavement markings and striping. The standard pavement width will enable the street to easily transform as land use intensity or density changes over time.



EXHIBIT B

4a COLLECTOR (INTERSECTION):

Design Service Volume: < 4,000 vpd,
< 6000 vpd
with left
turn bays

Desired Operating Speed: 25-30 mph

Travel Lanes: Two 14' shared
motorist and
cyclist lanes

Turn Lane: 11' turn bays
where warranted

Bicycle Lanes: Shared with
motorist lane

Parking: None

Paved Width: 41' from face
of curb

Right of Way: 70'

Sidewalks: Both sides of
street, min.
5' wide,
located in R.O.W.
at R.O.W. line.

Greenspace: Both sides of
street, min.
9' wide

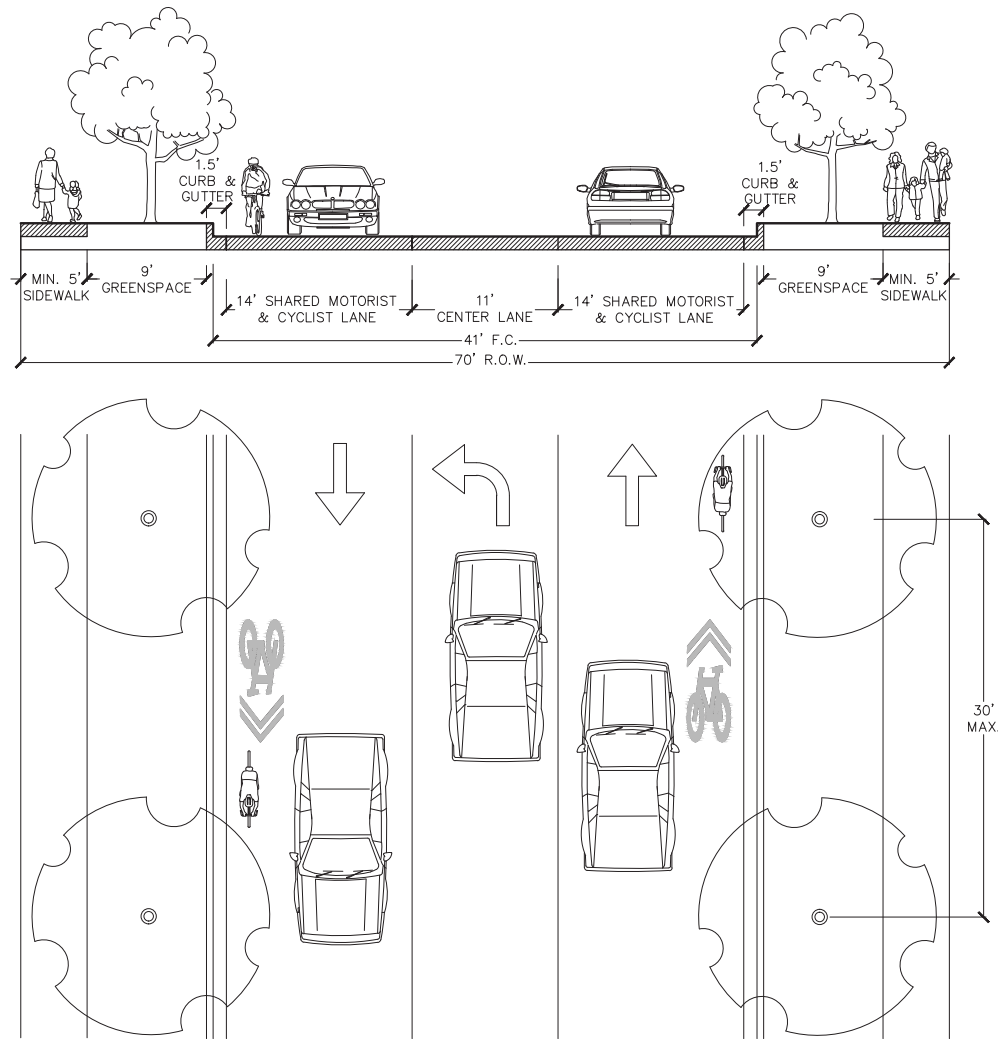


EXHIBIT B

4b COLLECTOR (SHARROW):

Design Service Volume: < 4,000 vpd,
< 6000 vpd with left
turn bays

Desired Operating Speed: 25-30 mph

Travel Lanes: Two 14' shared
motorist and cyclist
lanes

Turn Lane: 11' turn bays where
warranted (See 4a)

Bicycle Lanes: Shared with drive lane
None

Parking: 30' from face of curb

Right of Way: 59'

Sidewalks: Both sides of street,
min. 5' wide,
located in R.O.W. at
R.O.W. line

Greenspace: Both sides of street,
min. 9' wide

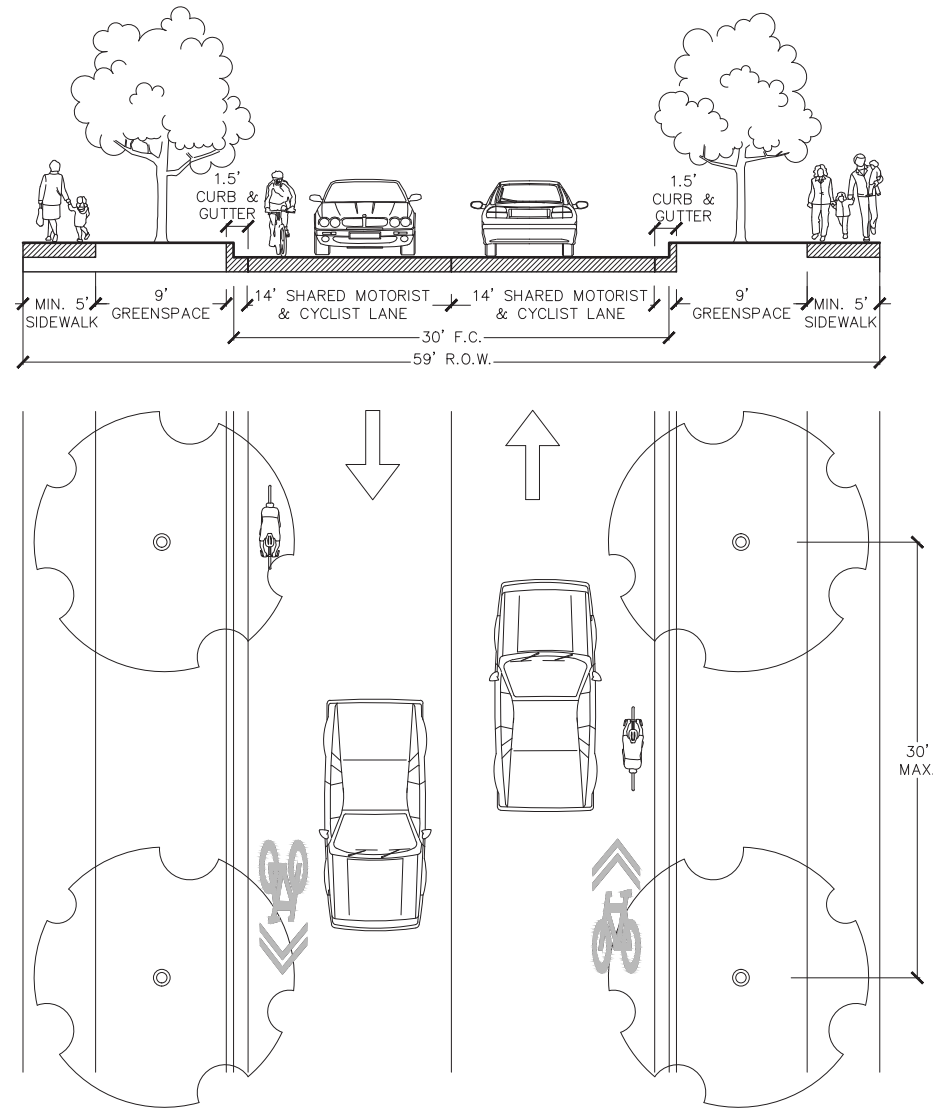


EXHIBIT B

4c COLLECTOR (WITH PARKING):

Design Service Volume: < 4,000 vpd,
< 6000 vpd

Desired Operating Speed: 25-30 mph

Travel Lanes: Two 11' motorist lanes

Turn Lane: None

Bicycle Lanes: Shared with motorist lanes

Parking: One 8' lane

Paved Width: 30' from face of curb

Right of Way: 59'

Sidewalks: Both sides of street, min. 5' wide, located in R.O.W. at R.O.W. line.

Greenspace: Both sides of street, min. 9' wide

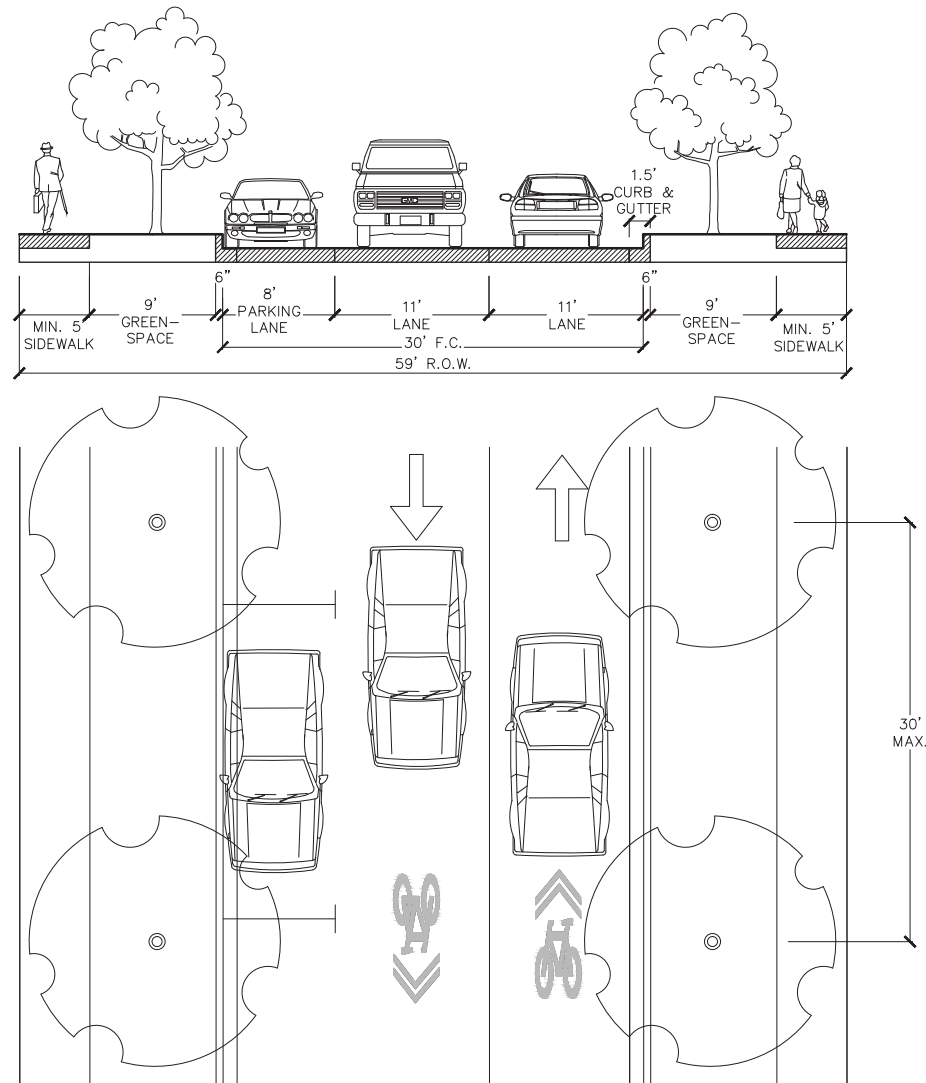
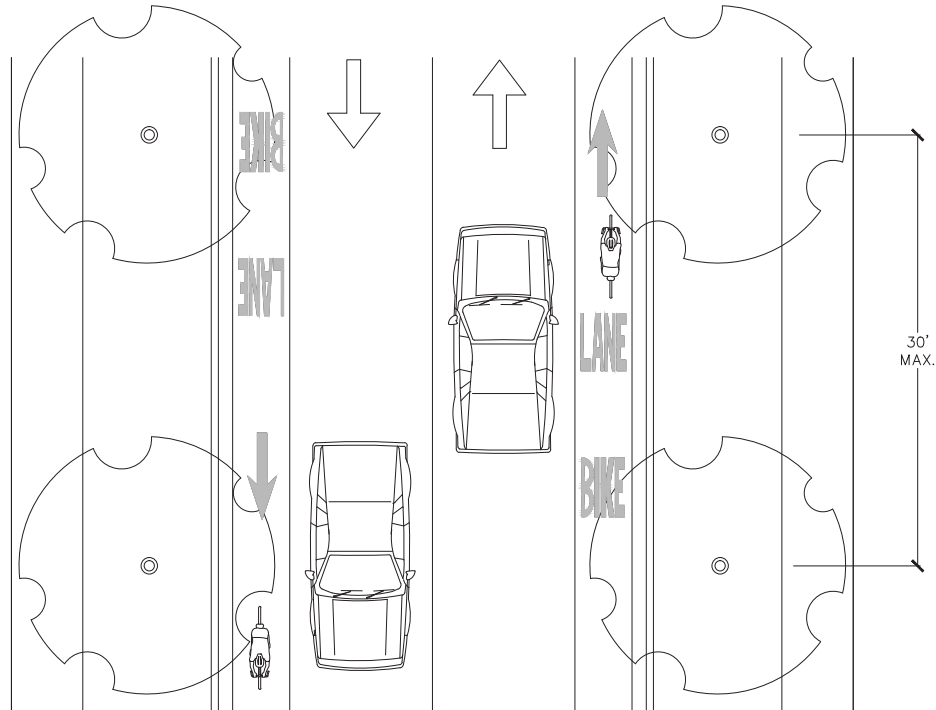
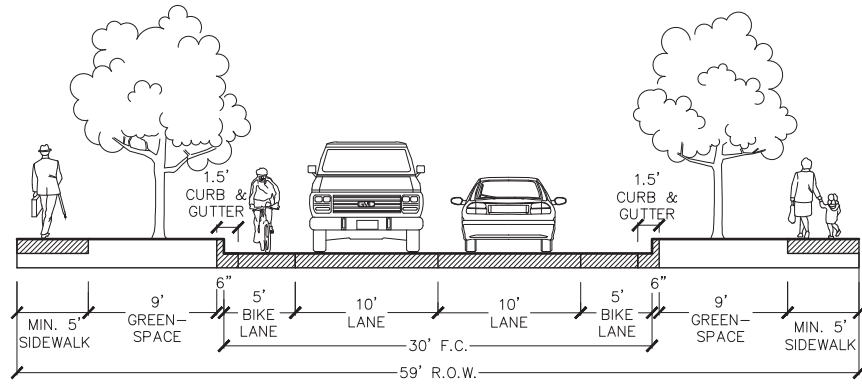


EXHIBIT B

4d COLLECTOR (WITH BICYCLE LANES):

Design Service Volume:	< 4,000 vpd, < 6000 vpd
Desired Operating Speed:	25-30 mph
Travel Lanes:	Two 10' motorist lanes
Turn Lane:	None
Bicycle Lanes:	5' wide, both sides of street against curb
Parking:	None
Paved Width:	30' from face of curb
Right of Way:	59'
Sidewalks:	Both sides of street, min. 5' wide, located in R.O.W. at R.O.W. line.
Greenspace:	Both sides of street, min. 9' wide



12.2.5

MINOR ARTERIAL STREETS

MINOR ARTERIAL STREETS provide mobility throughout the city, encouraging multiple modes of transportation within the arterial network. Access should be limited to controlled intersections where possible. They have a moderate level of access management.

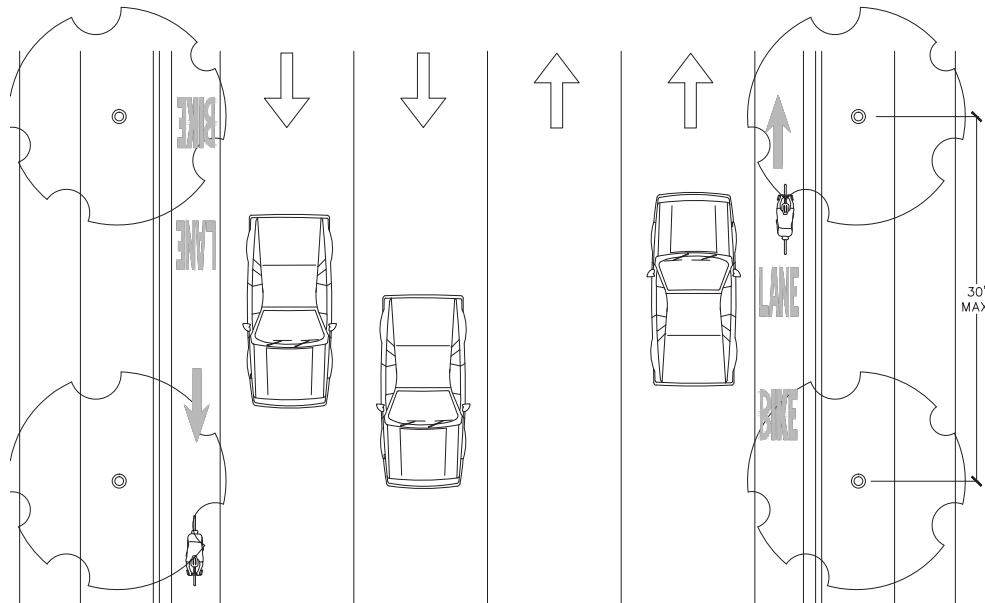
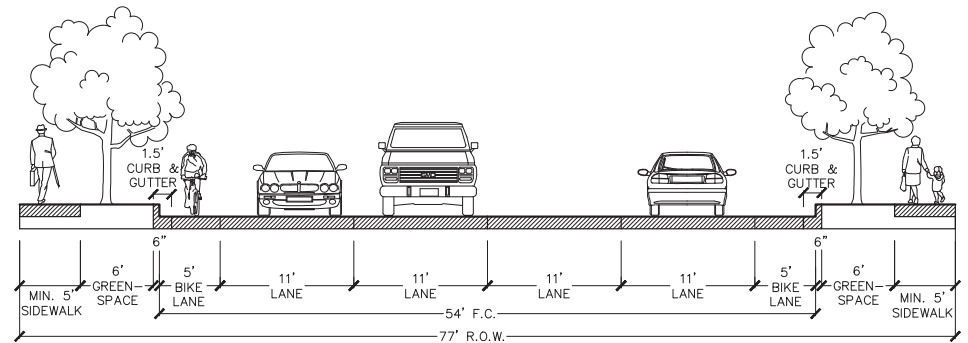
5 MINOR ARTERIAL:

Design Service Volume: < 12,200 vpd
 Desired Operating Speed: 30-40 mph
 Travel Lanes: Four 11' lanes
 Bicycle Lanes: 5' wide, both sides of street next to curb

Parking: None
 Paved Width: 54' from face of curb
 Right of Way: 77'

Sidewalks: Both sides of street, min. 5' wide, located in R.O.W. at R.O.W. line

Greenspace: Both sides of street, min. 6' wide



12.2.6

PRINCIPAL ARTERIAL STREETS

PRINCIPAL ARTERIAL STREETS carry high volumes of through traffic. They are designed as boulevards for beauty and safety. They have a high level of access management and access should be primarily by way of cross-streets rather than individual curb cuts.

6 PRINCIPAL ARTERIAL BOULEVARD (WITH BICYCLE LANES) :

Design Service Volume: < 17,600 vpd

Desired Operating Speed: 30-40 mph

Travel Lanes: Four 11' lanes

Bicycle Lanes: 5' wide, both sides of street next to curb

Median: 10', 12' turn lane at intersections

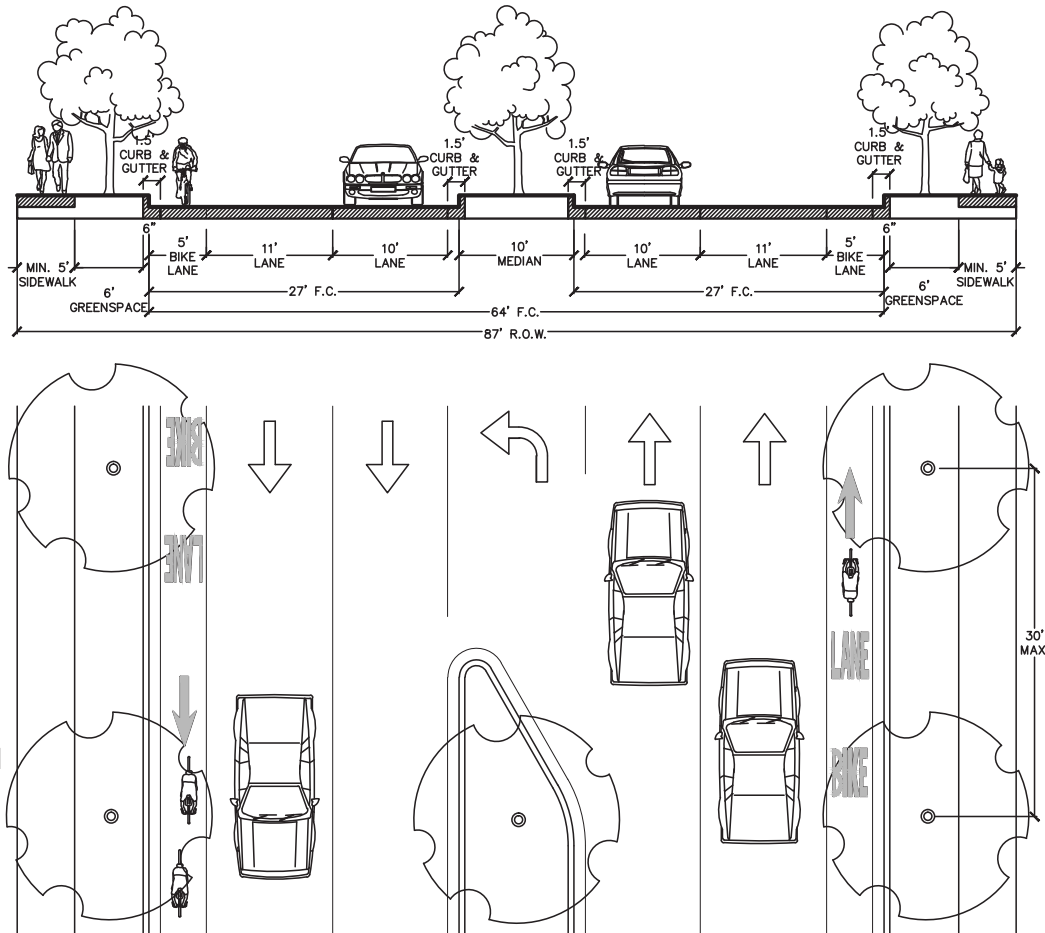
Parking: None

Paved Width: 27' from face of curb
64' entire width including median

Right of Way: 87'

Sidewalks: Both sides of street, min. 5' wide, located in R.O.W. at R.O.W. line

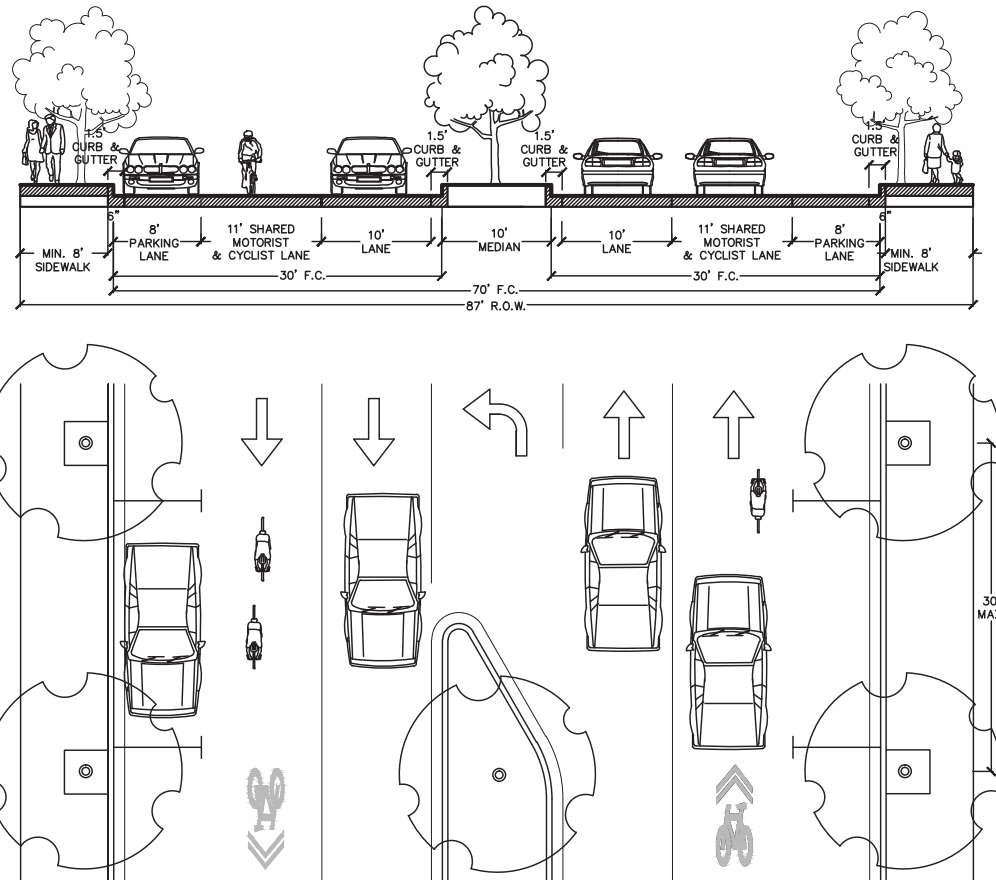
Greenspace: Both sides of street, min. 6' wide



PRINCIPAL ARTERIALS WITH ON-STREET PARKING are intended to be used in compact urban environments that are highly walkable and where building entries front the street. This street section is not intended to be used where traffic speeds exceed 30 MPH.

7 PRINCIPAL ARTERIAL BOULEVARD (WITH PARKING):

Design Service Volume: < 17,600 vpd
 Desired Operating Speed: 25-30 mph
 Travel Lanes: Four 11' lanes
 Bicycle Lanes: Shared with outer auto travel lanes
 Median/Turn Lane: 10' median, 12' turn lane
 Parking: 8' lane, both sides of street
 Paved Width: 30' from face of curb with median
 42' from face of curb with turn lane
 70' entire width including median
 87' Right of Way:
 Sidewalks: Both sides of street, min. 8' wide with grated tree wells against curb
 Greenspace: None



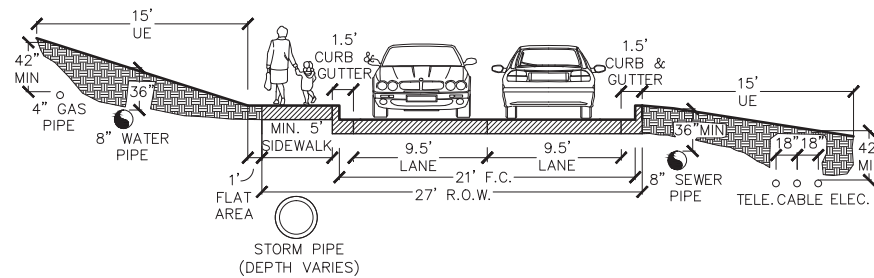
12.2.7

HILLTOP-HILLSIDE OVERLAY DISTRICT STREETS

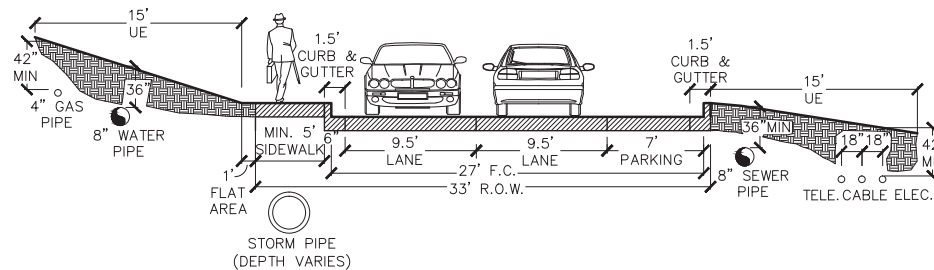
H.H.O.D. (HILLTOP-HILLSIDE OVERLAY DISTRICT) STREETS are designed with a narrow right-of-way in order to minimize grading disturbance and tree removal, while still accommodating utility locations, vehicular and pedestrian movements. Hillside Residential streets carry limited traffic through neighborhoods, while Hillside Local streets collect traffic from the neighborhoods and disperse it to minor arterials. They have a low level of access management.

8a HILLSIDE RESIDENTIAL:

Design Service Volume: < 500 vpd
 Desired Operating Speed: 15-20 mph
 Travel Lanes: Two 9.5' lanes
 Parking: Not Allowed
 Paved Width: 21' from face of curb
 Right of Way: 27'
 Sidewalks: One, at least 5' wide, abutting curb
 Greenspace: None
 Utility Easements: Two, 15' at R.O.W.

**8b HILLSIDE LOCAL:**

Design Service Volume: < 4000 vpd
 Desired Operating Speed: 20-25 mph
 Travel Lanes: Two 9.5' lanes
 Parking: One 7' lane
 Paved Width: 27' from face of curb
 Right of Way: 33'
 Sidewalks: One, at least 5' wide, abutting curb
 Greenspace: None
 Utility Easements: Two, 15' at R.O.W.



12.2.8 DOWNTOWN MASTER PLAN STREETS

DOWNTOWN MASTER PLAN STREETS are specific to the Downtown Master Plan area.

9a ST 37 9/9

Design Service Volume:

< 300 vpd

Traffic Lanes:

Two 9' lanes

Parking:

Not Allowed

Paved Width:

20' from face of curb

Right of Way:

37'

Sidewalks:

Both sides of street, min. 8' wide with grated tree wells against curb
Both sides of street, tree wells

Greenspace:

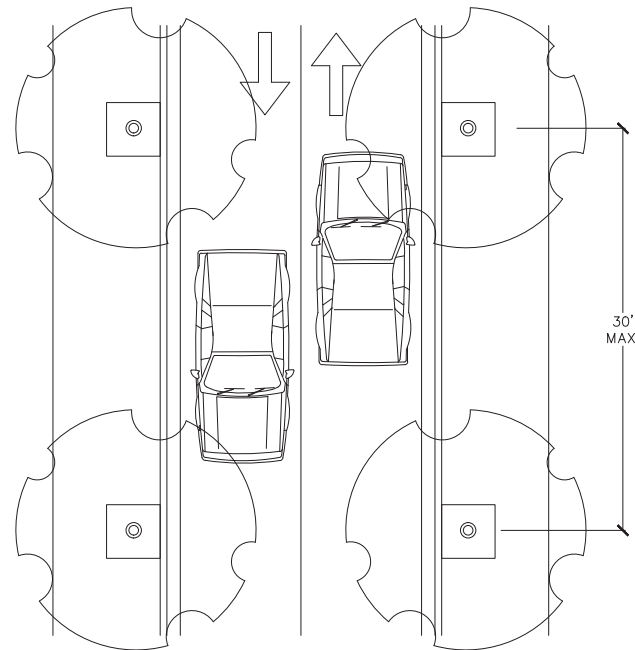
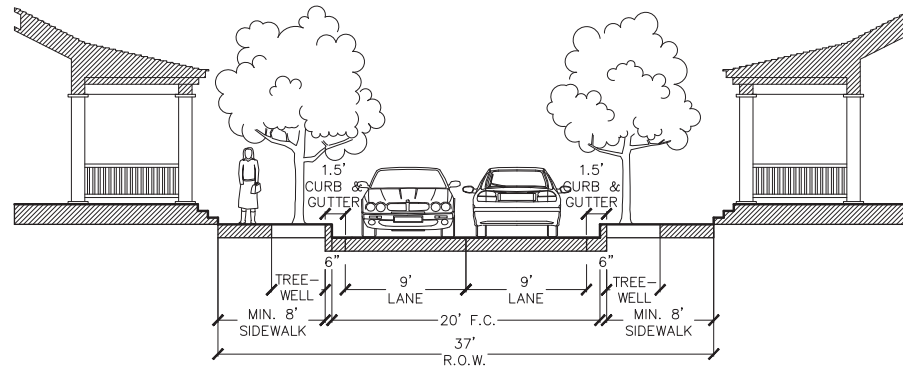


EXHIBIT B

9b ST 45 8/10/9

Design Service Volume:

< 300 vpd

Traffic Lanes:

One 10' lane,
one 9' lane

Parking:

One 8' lane

Paved Width:

28' from face of
curb

Right of Way:

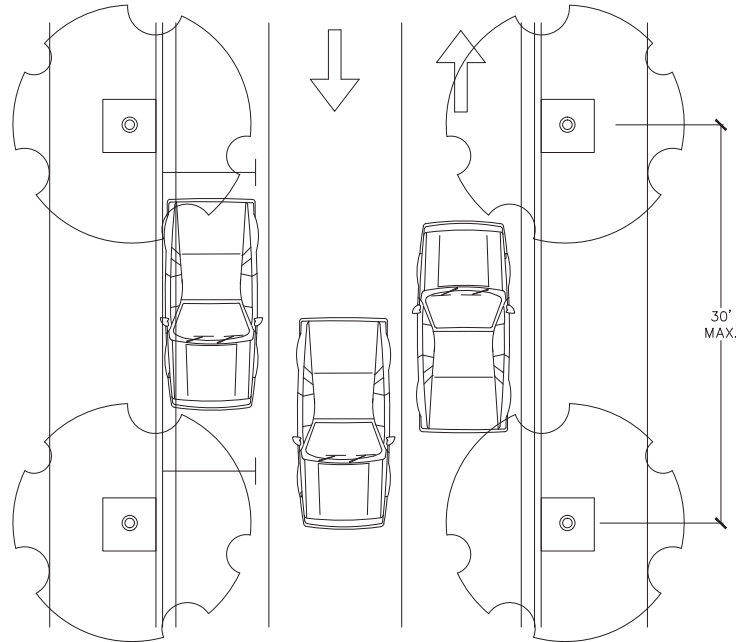
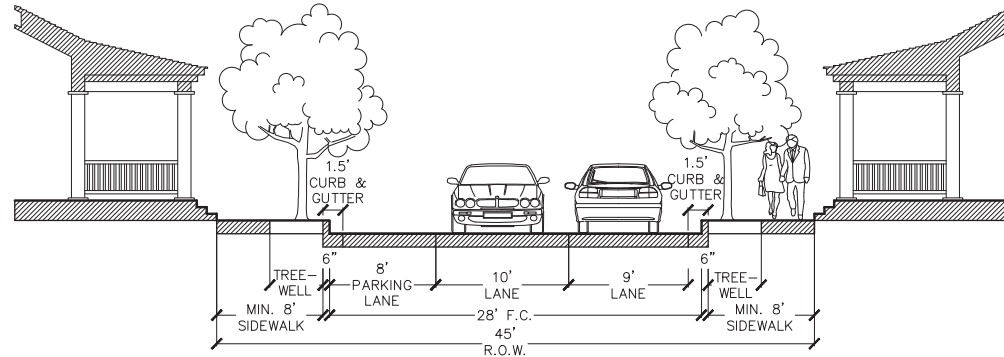
45'

Sidewalks:

Both sides of
street, min. 8'
wide with grated
tree wells against
curb

Greenspace:

Both sides of
street, tree wells

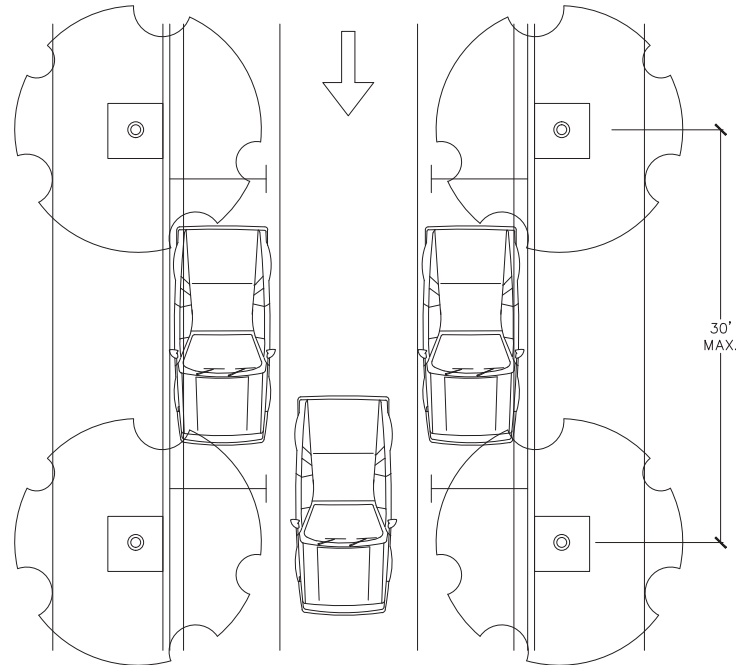
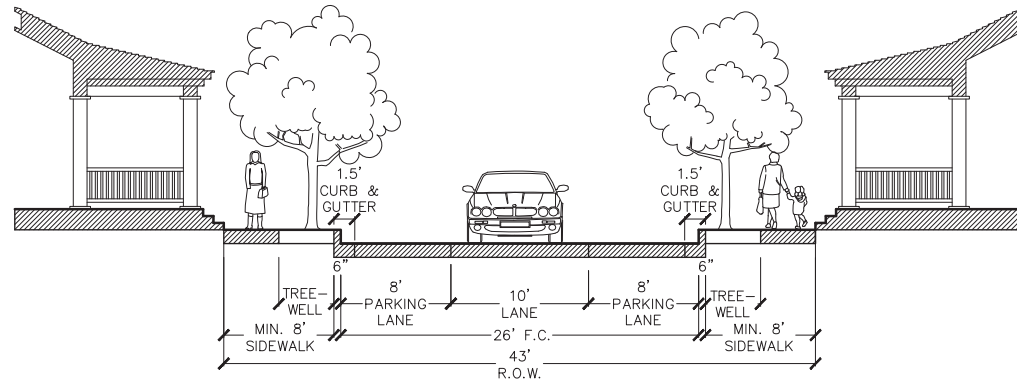


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EXHIBIT B

9c ST 43 8/10/8 *

Design Service Volume: < 4,000 vpd
 Traffic Lanes: One 10' lane
 Parking: Two 8' lanes
 Paved Width: 26' from face of curb
 Right of Way: 43'
 Sidewalks: Both sides of street, min. 8' wide with grated tree wells against curb
 Greenspace: Both sides of street, tree wells



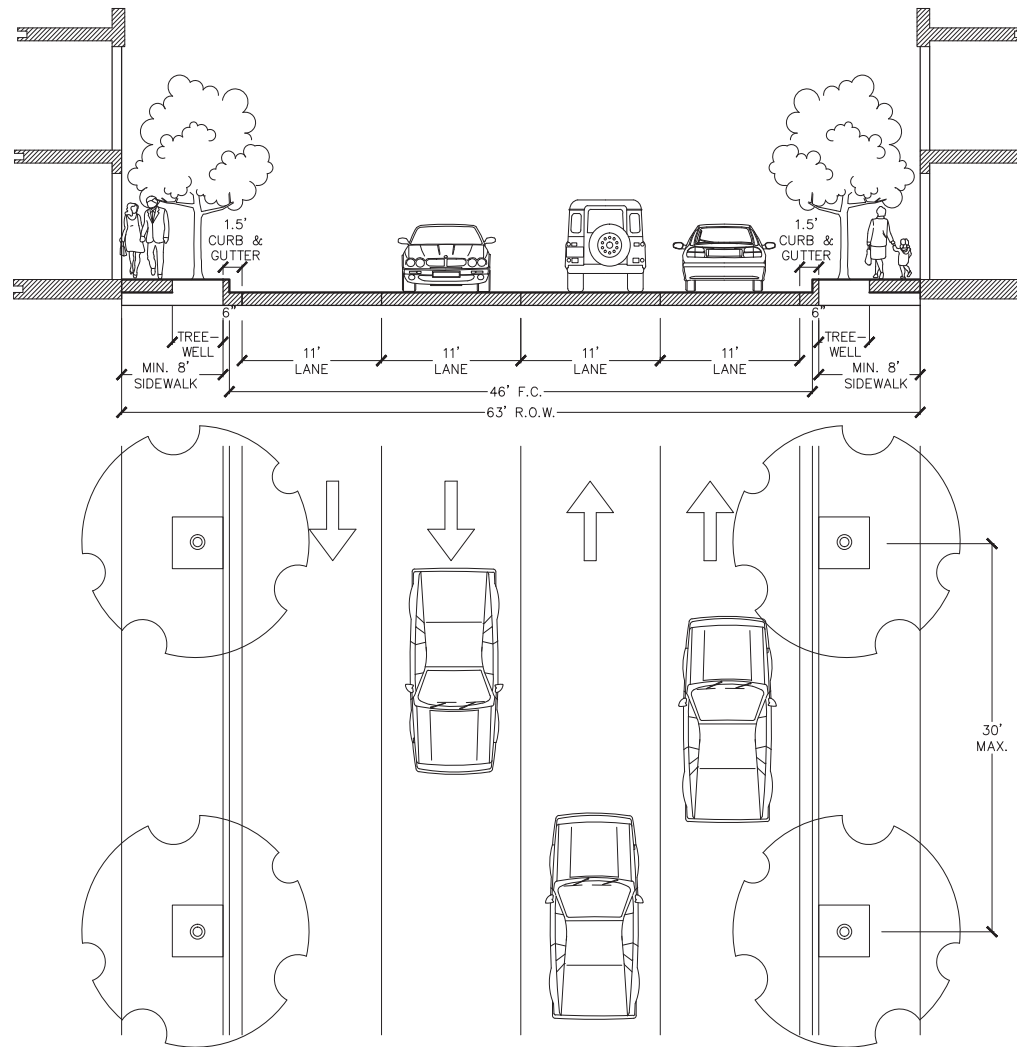
* This street cross section is permitted only for portions of Locust Avenue and Meadow street in the Downtown Master Plan Area.



EXHIBIT B

9d ST 63 11/11/11/11

Design Service Volume: <17,600 vpd
 Traffic Lanes: Four 11' lanes
 Bicycle Lanes: None
 Parking: None
 Paved Width: 46' from face of curb
 Right of Way: 63'
 Sidewalks: Both sides of street, min. 8' wide with grated tree wells against curb
 Greenspace: Both sides of street, tree wells



12.2.9

TWO-WAY SQUARE

The TWO-WAY SQUARE is designed to be utilized in town-square type scenarios, central to development, adjacent to mixed use with high volumes of pedestrian traffic. On street parking and high levels of pedestrian use keep vehicular speeds low.

10 TWO-WAY SQUARE

Design Service Volume:

< 4,000 vpd

Traffic Lanes:

Two 12' lanes

Bicycle Lanes:

Shared with motorist lane

Parking:

Two 19' lanes, angled 45°, with back in or pull in 62' from face of curb 79'

Paved Width:

Right of Way:

Sidewalks:

Both sides of street, min. 12' wide with grated tree wells against curb

Greenspace:

Both sides of street, tree wells

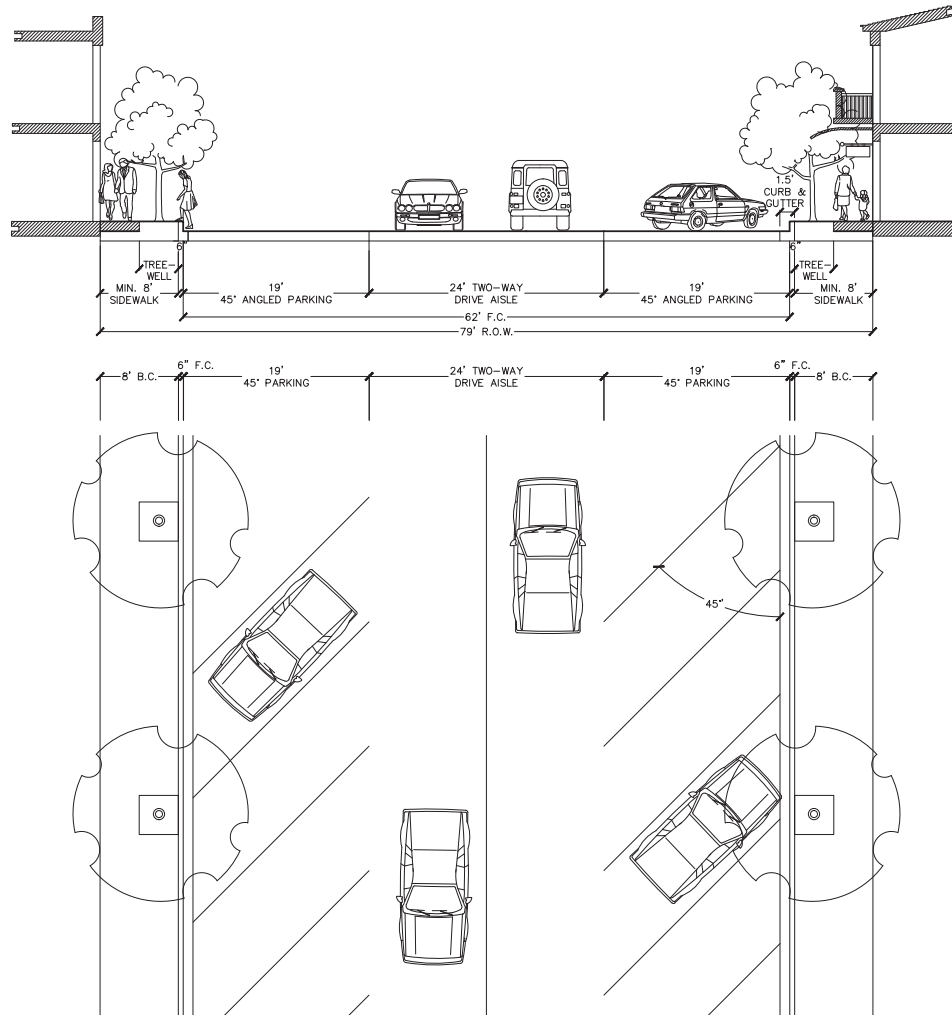


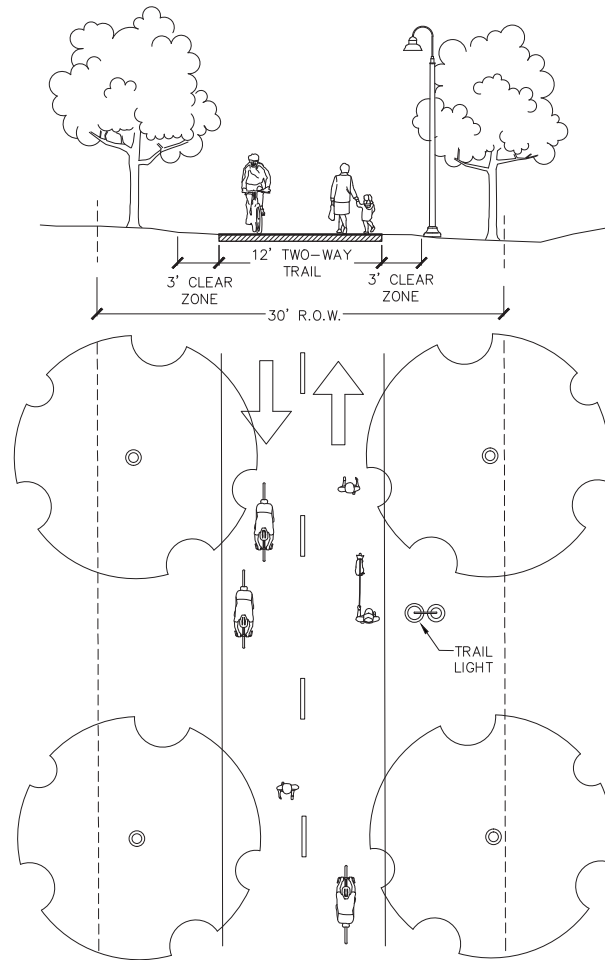
EXHIBIT B

PAVED TRANSPORTATION TRAILS provide safe, alternative means of transportation for a variety of non-motorized uses. The Fayetteville Alternative Transportation and Trails Master Plan identifies trail corridors that connect neighborhoods, businesses, schools and parks. The goal of the Master Plan is to create an interconnected system of trails throughout Fayetteville to provide a network of alternative transportation routes for people of all ages to safely travel around the City. All transportation trails are constructed 12 feet in width in order to accommodate the high volume and variety of users including walkers, joggers, strollers, bicycles, wheelchairs, and any other non-motorized use.

ASPHALT TRAIL is used in areas where the trail is located above of the flood prone areas and away from vehicle traffic. Trail pavement should match the adjacent pavement surface when connecting to existing trail.

CONCRETE TRAIL is used when the trail is located in a flood prone area along a creek. Concrete holds up much better than asphalt when subjected to flood waters. Concrete is also used at road crossings including the ramps and other areas where increased durability is necessary. Trail pavement should match the adjacent pavement surface when connecting to existing trail.

Desired Operating Speed:	15 mph
Travel Lanes:	Two 6' lanes
Paved Width:	12'
Right of Way:	30' minimum
Greenspace:	Both sides of trail



Master Transportation Plan Guiding Policies

Circulation: *Guiding Policies*

In order to guide the formulation of a Master Transportation Plan and direct the Planning Commission regarding land use decisions which affect transportation issues, the following policies are suggested:

- 12.2.10.a Promote the coordinated and efficient use of all available and future transportation modes. (Goal 4)
- 12.2.10.b Meet the diverse transportation needs of the people of the City, including rural and urban populations and the unique mobility needs of the elderly and disability communities.
- 12.2.10.c Ensure the repair and necessary improvements of roads and bridges throughout the City to provide a safe, efficient and adequate transportation network.
- 12.2.10.d Minimize the harmful effects of transportation on public health and on air and water quality, land and other natural resources.
- 12.2.10.e Promote reliance on energy-efficient forms of transportation.
- 12.2.10.f Incorporate a public participation process in which the public has timely notice and opportunity to identify and comment on transportation concerns.
- 12.2.10.g Monitor and improve transportation facilities to conveniently serve the intra-city and regional travel needs of Fayetteville residents, business and visitors.
- 12.2.10.h Monitor the incidence of traffic accidents and implement physical and operational measures to improve public safety.
- 12.2.10.i Support mass transit which offers convenient and reliable alternatives to the automobile. (Goal 4e)
- 12.2.10.j Establish facilities which accommodate safe and convenient travel for pedestrians and bicyclists. (Goal 4e)
- 12.2.10.k Promote mixed-use and traditional neighborhood development to reduce roadway demand and change travel patterns. (Goal 3b, Goal 4)
- 12.2.10.l Encourage consideration of the impacts on the transportation network in land use decisions made by the Planning Commission.
- 12.2.10.m Periodically update the Master Street Plan in order to evaluate the context sensitivity and the appropriateness of right-of-way dedication requirements.
- 12.2.10.n Encourage the construction of sheltered bus stops and bicycle parking facilities at transit stops, shopping centers and employment centers.
- 12.2.10.o Support multi-modal transportation options such as trails, sidewalks, bike lanes and mass transit. (Goal 4)
- 12.2.10.p Promote the continued expansion of the City's trail network through proactive planning and the acquisition of trail easements. (Goal 4)
- 12.2.10.q Promote increased bicycle usage by providing integrated bicycle facilities on new and redesigned roadways, where appropriate. (Goal 4)

